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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,610	04/14/2005	Laurent Regnier	S1022.81223US00	8399
46329	7590	09/09/2009	EXAMINER	
STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206			PETRANEK, JACOB ANDREW	
		ART UNIT	PAPER NUMBER	
		2183		
		MAIL DATE	DELIVERY MODE	
		09/09/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/531,610	<b>Applicant(s)</b> REGNIER, LAURENT
	<b>Examiner</b> Jacob Petranek	<b>Art Unit</b> 2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 June 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 and 15-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-13 and 15-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-146/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-13 and 15-20 are pending.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/11/2009 has been entered.
3. The office acknowledges the following papers:  
Claims and arguments filed on 5/1/2009.

***Withdrawn objections and rejections***

4. The 35 U.S.C. 112 second paragraph rejections for claims 1-20 are withdrawn due to amendment.

***Allowable Subject Matter***

5. Claims 1-13 and 15-20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
6. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Claim objections***

7. Claims 2, 13, and 18-20 is objected to for the following reason:
8. Claim 2 recites "the areas" at line 2 of the claim that should be changed to "the plurality of area" for proper antecedent basis.
9. Claims 13 and 19 recite "the sequence instructions" at line 2 of the claims that should be changed to "the sequence of instructions" for proper antecedent basis.
10. Claims 18 and 20 recite "the external analysis" at line 2 of the claim that should be changed to "the external analysis tool" for proper antecedent basis.

***New Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
12. Claims 1-13 and 15-20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the storage time is provided to the external analysis tool by modifying a state of the output terminal to." It's unclear if an additional statement was to be included after "to" to indicate a further action or if "to" was accidentally not deleted in the amendment. For examination purposes, the last word "to" is deleted.

Claim 1 recites "simultaneously with storing in the buffer memory, at a storage time, of a digital message of a type from the plurality of types, the type corresponding to the instruction type associated with an output terminal from the plurality of output

terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal." Specifically, it's unclear what actions are being simultaneously performed. For examination purposes, the limitation will be interpreted as "simultaneously with storing in the buffer memory[], at a storage time, of] a digital message of a type from the plurality of types at a storage time, the type corresponding to the instruction type associated with an output terminal from the plurality of output terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal" to make it clear that storing of a digital message and providing the storage time are the two actions performed simultaneously.

Claim 7 recites "the storage time is provided to the external analysis tool by modifying a state of the output terminal to." It's unclear if an additional statement was to be included after "to" to indicate a further action or if "to" was accidentally not deleted in the amendment. For examination purposes, the last word "to" is deleted.

Claim 7 recites "simultaneously with storing in the buffer memory, at a storage time, of a digital message of a type from the plurality of types, the type corresponding to the instruction type associated with an output terminal from the plurality of output terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal." Specifically, it's unclear what actions are being simultaneously performed. For examination purposes, the limitation will be interpreted as "simultaneously with storing in the buffer memory[], at a storage time, of] a digital message of a type from the plurality of types at a storage time, the type corresponding to the instruction type associated with an output terminal from the plurality of output

terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal" to make it clear that storing of a digital message and providing the storage time are the two actions performed simultaneously.

Claim 8 recites "simultaneously with storing in the buffer memory, at a first storage time, a first digital message of a first type corresponding to an instruction type associated with a first output terminal from a plurality of output terminals connected to an external analysis tool, providing the first storage time to the external analysis tool by modifying a state of the first output terminal." Specifically, it's unclear what actions are being simultaneously performed. For examination purposes, the limitation will be interpreted as "simultaneously with storing in the buffer memory[], at a first storage time,]] a first digital message of a first type corresponding to an instruction type associated with a first output terminal from a plurality of output terminals connected to an external analysis tool at a first storage time, providing the first storage time to the external analysis tool by modifying a state of the first output terminal" to make it clear that storing of a first digital message and providing the first storage time are the two actions performed simultaneously.

Claim 8 recites "simultaneously with storing in the buffer memory, at a second storage time, a second digital message of a second type corresponding to an instruction type associated with a second output terminal from the plurality of output terminals, providing the second storage time to the external analysis tool by modifying the state of the second output terminal." Specifically, it's unclear what actions are being simultaneously performed. For examination purposes, the limitation will be interpreted

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as "simultaneously with storing in the buffer memory[], at a second storage time,] a second digital message of a second type corresponding to an instruction type associated with a second output terminal from the plurality of output terminals at a second storage time, providing the second storage time to the external analysis tool by modifying a state of the second output terminal" to make it clear that storing of a first digital message and providing the first storage time are the two actions performed simultaneously.

13. Claim 15 recites the limitation "the predetermined number of times" in lines 4-5 of the claim. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, no antecedent basis is established.

14. Claim 15 recites the limitation "the predetermined number of the coding block output terminals" in lines 5-6 of the claim. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, no antecedent basis is established.

15. Claim 19 recites "substantially simultaneously" at lines 5 and 8. The term substantially is indefinite and it cannot be determined what the metes and bounds of the term are.

16. Claims 2-6, 9-13, 16-18, and 20 are rejected due to their dependency.

#### ***Response to Arguments***

17. The arguments presented by Applicant in the response, received on 5/1/2009 are considered persuasive.

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18. Applicant argues "Yamashita and Trauben do not teach or suggest all of the limitations of claim 8. In particular, none of the cited references teaches or suggests "simultaneously with storing in the buffer memory, at a first storage time, a first digital message of a first type corresponding to an instruction type associated with a first output terminal from a plurality of output terminals connected to an external analysis tool, providing the first storage time to the external analysis tool by modifying a state of the first output terminal; and simultaneously with storing in the buffer memory, at a second storage time, a second digital message of a second type corresponding to an instruction type associated with a second output terminal from the plurality of output terminals, providing the second storage time to the external analysis tool by modifying the state of the second output terminal so that the external analysis tool determines a time elapsed between storing at the first storage time of the first digital message and storing at the second storage time of the second digital message," as recited in claim 8."

This argument is found to be persuasive for the following reason. The claimed limitations require that simultaneously an output terminal for a first instruction is modified as a message for the first instruction is stored in a buffer memory. The examiner agrees that the combination doesn't teach the newly claimed limitations. Specifically, Yamashita disclosed that a first message is stored first, and later outputted to an external analysis tool. The combination with Trauben allows for a plurality of output terminals from the buffer storage relating to each instruction type. Thus, the combination doesn't read upon the newly claimed limitations. In addition, a new search

hasn't found new prior art that reads upon the newly claimed limitations. Thus, the claim is considered allowable.

19. Applicant argues "Each of claims 1 and 7 has been amended to recite, inter alia, "simultaneously with storing in the buffer memory, at a storage time, of a digital message of a type from the plurality of types, the type corresponding to the instruction type associated with an output terminal from the plurality of output terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal." On page 14, the Office Action states that the Examiner agrees that "an amendment stating that a given message is stored and outputted via an output terminal simultaneously would overcome the rejection." Applicant respectfully notes that claims 1 and 7 each recite that when a digital message is stored in the buffer memory at a certain storage time, this storage time is simultaneously provided to the external analysis tool."

This argument is found to be persuasive for the following reason. The claimed limitations require that simultaneously an output terminal for an instruction is modified as a message for the instruction is stored in a buffer memory. The examiner agrees that the combination doesn't teach the newly claimed limitations. Specifically, Yamashita disclosed that a first message is stored first, and later outputted to an external analysis tool. The combination with Trauben allows for a plurality of output terminals from the buffer storage relating to each instruction type. Thus, the combination doesn't read upon the newly claimed limitations. In addition, a new search

hasn't found new prior art that reads upon the newly claimed limitations. Thus, the claim is considered allowable.

### ***Conclusion***

The following is text cited from 37 CFR 1.111(c): In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Songer et al. (U.S. 7,080,283), taught real-time tracing and debugging for multiple processing cores.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Petranek whose telephone number is 571-272-5988. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jacob Petranek/  
Examiner, Art Unit 2183